

## Book Reviews and Notices

*Midwest Maize: How Corn Shaped the U.S. Heartland*, by Cynthia Clampitt. Urbana, Chicago, and Springfield: University of Illinois Press, 2015. xii, 288 pp. Illustrations, notes, bibliography, index. \$95.00 hardcover, \$19.95 paperback.

Reviewer Christopher Cumo is an independent scholar. He is the author of *Plants and People* (2015).

The study of corn has a vast literature. Traditionally, this topic is the purview of scientists, historians, economists, and archaeologists. With such an enormous and diverse literature, the importance of corn may be glimpsed only by a synthesis of the current state of knowledge. This is precisely the role *Midwest Maize* fills, and therein lies its value. To put the matter another way, Cynthia Clampitt offers no groundbreaking insights, but one would be mistaken to expect the breaking of new ground in a work that aims to bring together the insights from a variety of disciplines about a single topic, in this case corn. To be sure, the Midwest figures prominently in this book, but the treatment goes well beyond the confines of this region. The book introduces readers to corn from the basics of its botany to the rise of biotechnology. Clampitt is not a scientist by training but nonetheless handles the science of corn with clarity and skill. All the while she ventures into prehistory, history, and the social sciences, providing treatment that is exceptional in its breadth. Her method rests on secondary sources and aims to use history to create the context out of which Americans can meaningfully discuss the current problems of genetic engineering, biofuels, and what appears to be an impending Malthusian crisis.

This ambitious book is not easy to summarize. Clampitt characterizes it as a history, but much of the first chapter sinks roots into the prehistory of corn. From the outset she attempts to trace corn from its origins to the present in hopes of making clear why corn is so important to the United States. She ties the history of corn to the history of the Midwest and the rise of the Corn Belt. At the same time, she strides beyond the Midwest to demonstrate the relative rapidity with which the Columbian Exchange made corn a world crop. Throughout, her treatment of the structure and terminology of the corn plant, its parts, and the broad categories of corn is readable and easily accessible to non-scientists. As a food historian, Clampitt is passionate about the uses of

corn in the human diet, but she does not neglect the importance of corn in feeding livestock; in this sense we consume corn even when we eat a pork chop or a chicken breast. Clampitt traces the growth of the technology and science of corn, emphasizing such developments as the rise of the John Deere plow, the tractor, hybrid corn, no-till agriculture, and biotechnology. She traces the rise of meatpackers in Chicago within the context of the corn-livestock complex. She concludes with an even-handed assessment of the problems that beset humans within the context not merely of corn but of agriculture in general.

*Midwest Maize* deserves praise for its comprehensive treatment and readability. Non-scientists are the intended audience. Despite its excellence, a few details remain unclear. The book leaves readers to infer that American Indians were the first to create corn through purposeful breeding. Like so many agronomically important plants, corn has flowers, but only in the eighteenth century would European scientists understand that flowers are the reproductive structures of angiosperms. American Indians, therefore, could not have had any inkling of how to breed plants. Moreover, Clampitt follows conventional wisdom in attributing the invention of the seed drill to Jethro Tull, though she might have noted that ancient Egypt devised an important precursor. Covering the science of corn with great skill, Clampitt nonetheless omits the Southern Corn Leaf Blight in 1970 and 1971. In its own way that disaster confirmed the dangers of genetic uniformity, an issue that remains problematic for a number of crops. Clampitt repeats the statement that corn is the food plant that is most efficient in converting sunlight, water, and soil nutrients into biomass, though, depending on whom one reads, the potato and sugarcane apparently vie for that honor. Yet it would be unfair to pursue this line of thought at length. Everyone, amateur or professional, with an interest in corn should read *Midwest Maize*.

*Pemmican Empire: Food, Trade, and the Last Bison Hunts in the North American Plains, 1780–1882*, by George Colpitts. Studies in Environment and History. New York: Cambridge University Press, 2015. xii, 316 pp. Maps, illustrations, graphs, glossary, notes, bibliography, index. \$90.00 hardcover.

Reviewer Michel Hogue is assistant professor of history at Carleton University. He is the author of *Metis and the Medicine Line: Creating a Border and Dividing a People* (2015).

Those of us accustomed to watching our weight have learned to pay attention to the fat in our diets. George Colpitts thinks that historians ought to pay the same attention to the importance of fat in history. In